Meeting the Challenges of Ecological Restoration:

Collaboration between the Corps and The Nature Conservancy

Andy Warner & Ted Illston

The Nature Conservancy

SAVING THE LAST GREAT PLACES ON EARTH

The Nature Conservancy's Mission

To preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

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Guiding Principles

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- Science-based
- Non-confrontational
- Community-based conservation

↙ *Cooperative, solution-oriented, with an emphasis on places, people and the future*

TNC…the first 50 years

- Largest conservation organization in the world
- 14 million acres protected in US and Canada
- Work throughout the US, Latin America, Asia and Pacific Rim
- Over 1 million members
- 1,300 + preserves
- > 3,500 employees

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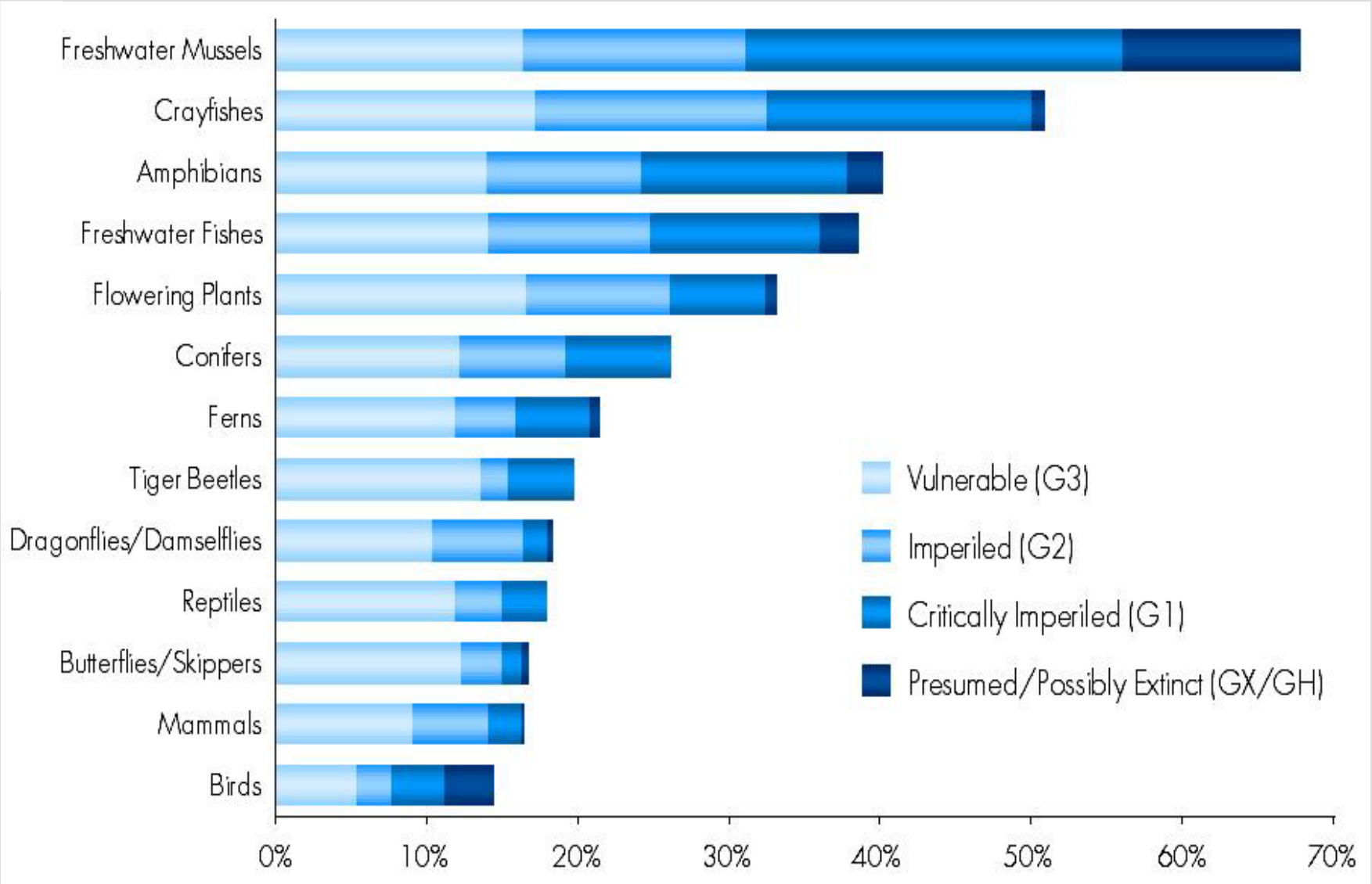
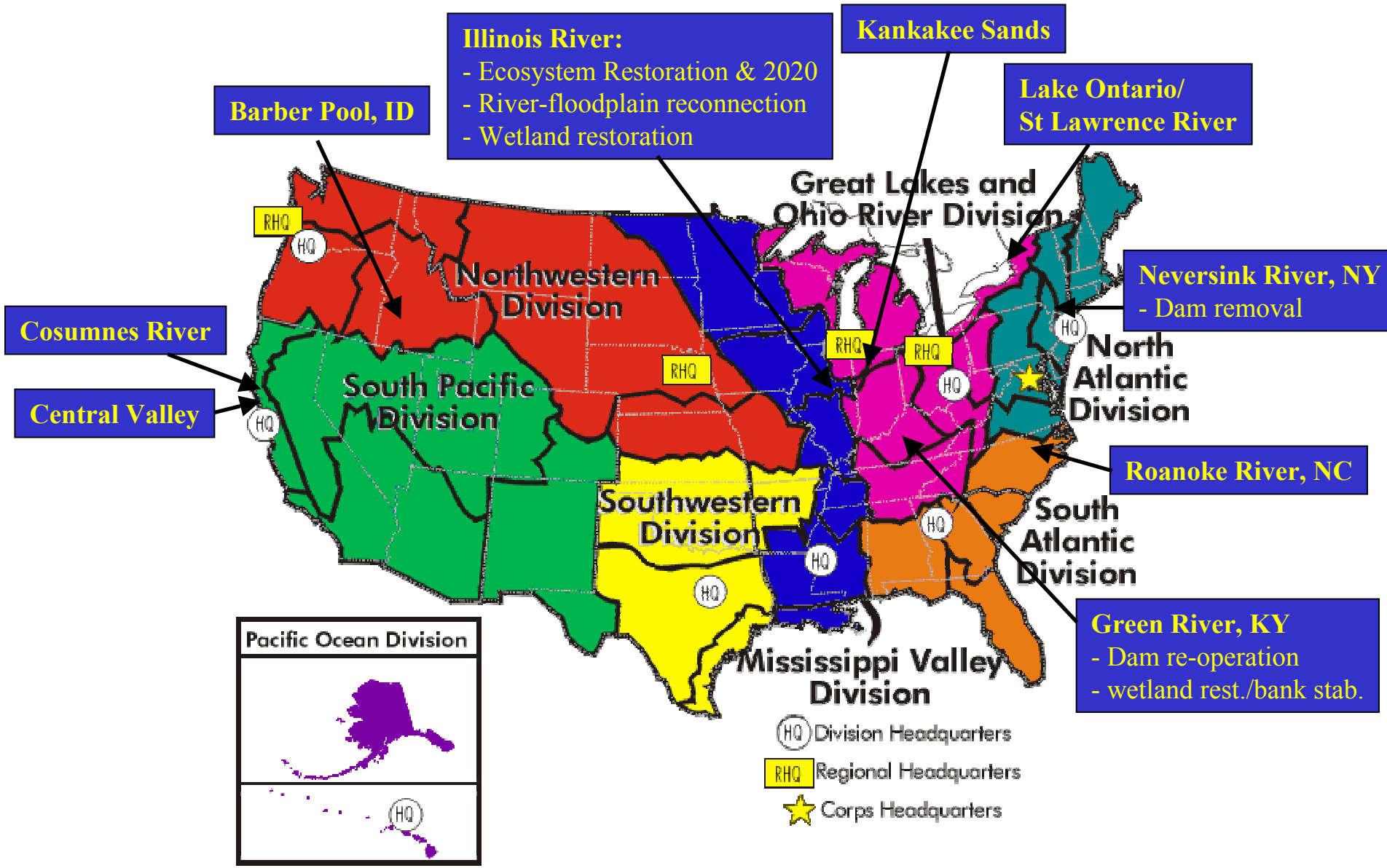
Proportion of U.S. Species at Risk



Example COE-TNC Projects



U.S. Army Corps of Engineers-The Nature Conservancy

Memorandum of Understanding

PURPOSE…

…to facilitate effective and efficient management of important biological resources within the context of the Corps' civil works and regulatory missions

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U.S. Army Corps of Engineers-The Nature Conservancy
Memorandum of Understanding

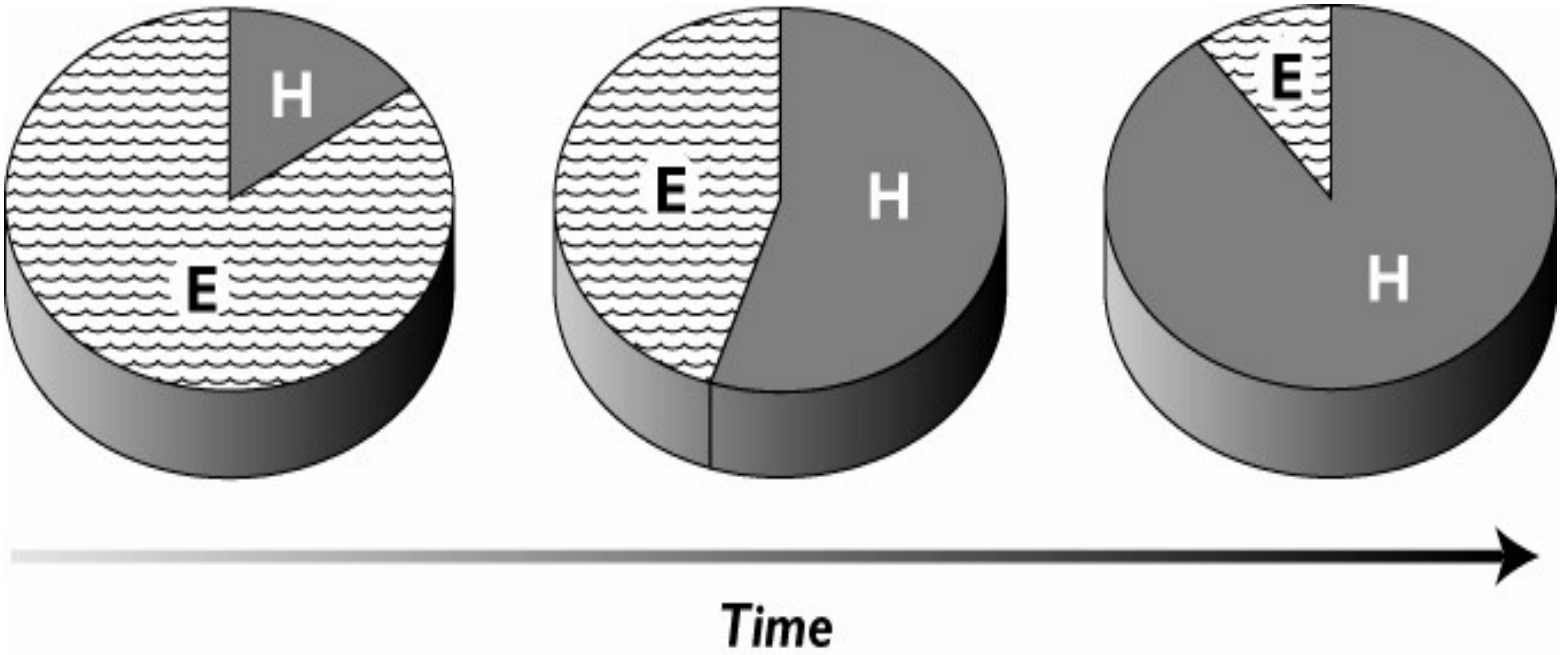
Objectives include…

- Protect or restore freshwater and coastal habitats for native animals and plants and natural communities;
- Advance our understanding of the distribution and condition of biological diversity associated with our Nation's marine, coastal and riparian waters;
- Promote non-structural flood protection and other measures to maintain natural ecosystem functions at sustainable levels;
- ***Encourage water management measures that benefit native animals and plants and natural communities while meeting human needs;***
- Foster demonstration projects to test promising water management strategies while monitoring their efficacy in meeting multiple objectives;
- Cooperate in the monitoring and management of rare and endangered species and their habitat potentially affected by projects and programs pursuant to this MOU.
- Promote the gathering and sharing of scientific data and research by either entity as it may be related to projects of mutual interest and concern.

Sustainable Water Management

Managing human uses of water such that enough water of sufficient quality is available for use by future generations

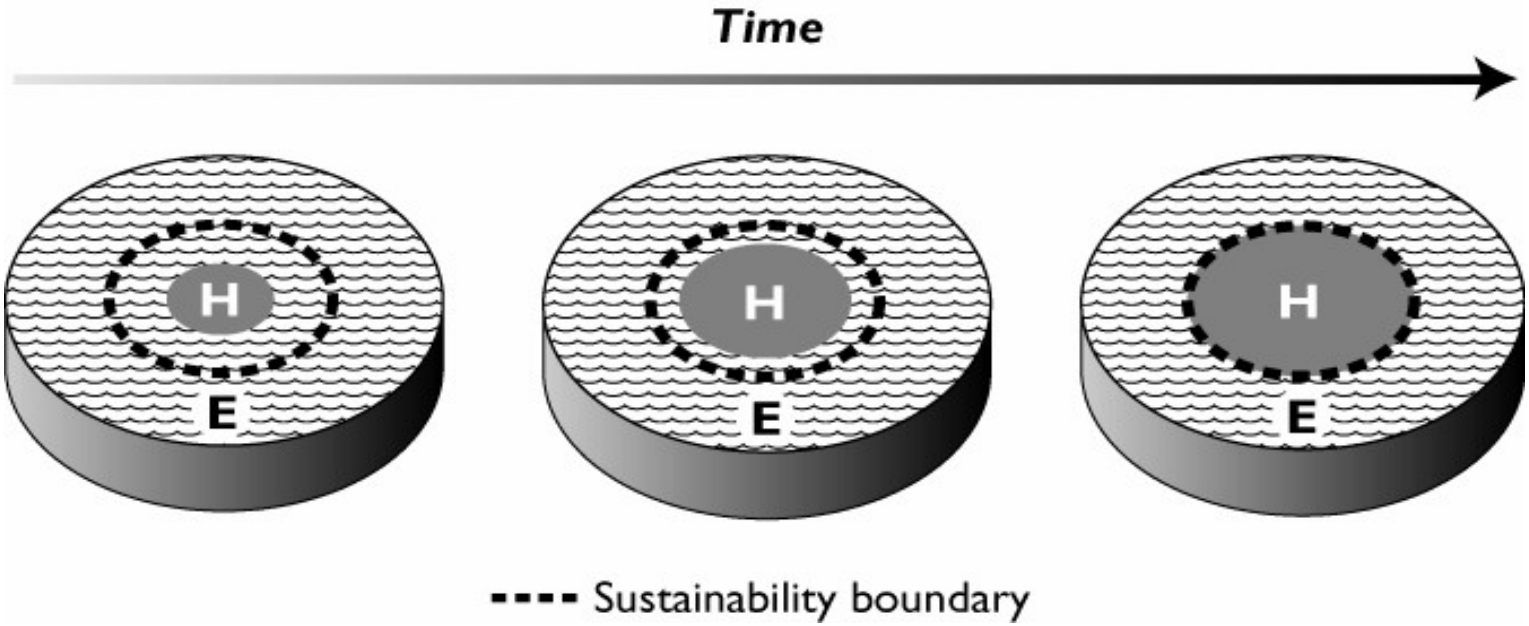
Traditional Approach to Water Management



E = ecosystem support

H = human use

An Ecologically Sustainable Approach to Water Management



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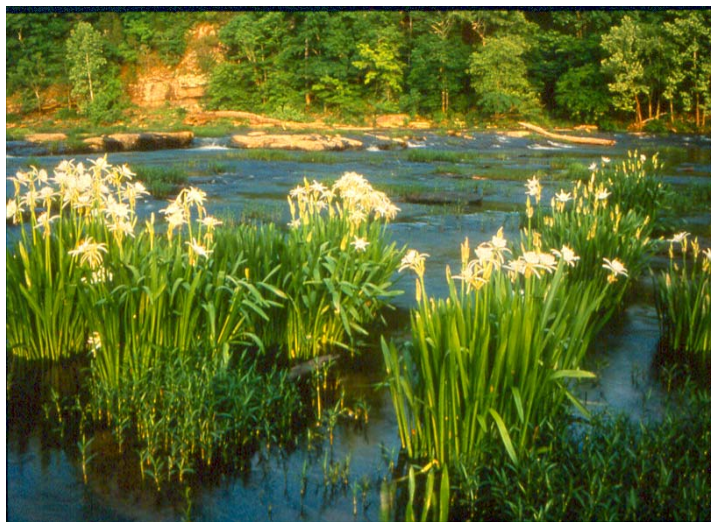
Ecologically Sustainable Water Management...

…protects river health while meeting inter-generational human needs for water and sustaining the full array of other products and services provided by natural freshwater ecosystems.

Ecosystem Flow Requirements:

Flow regimes of rivers that sustain healthy ecosystems and the goods and services that humans derive from them.

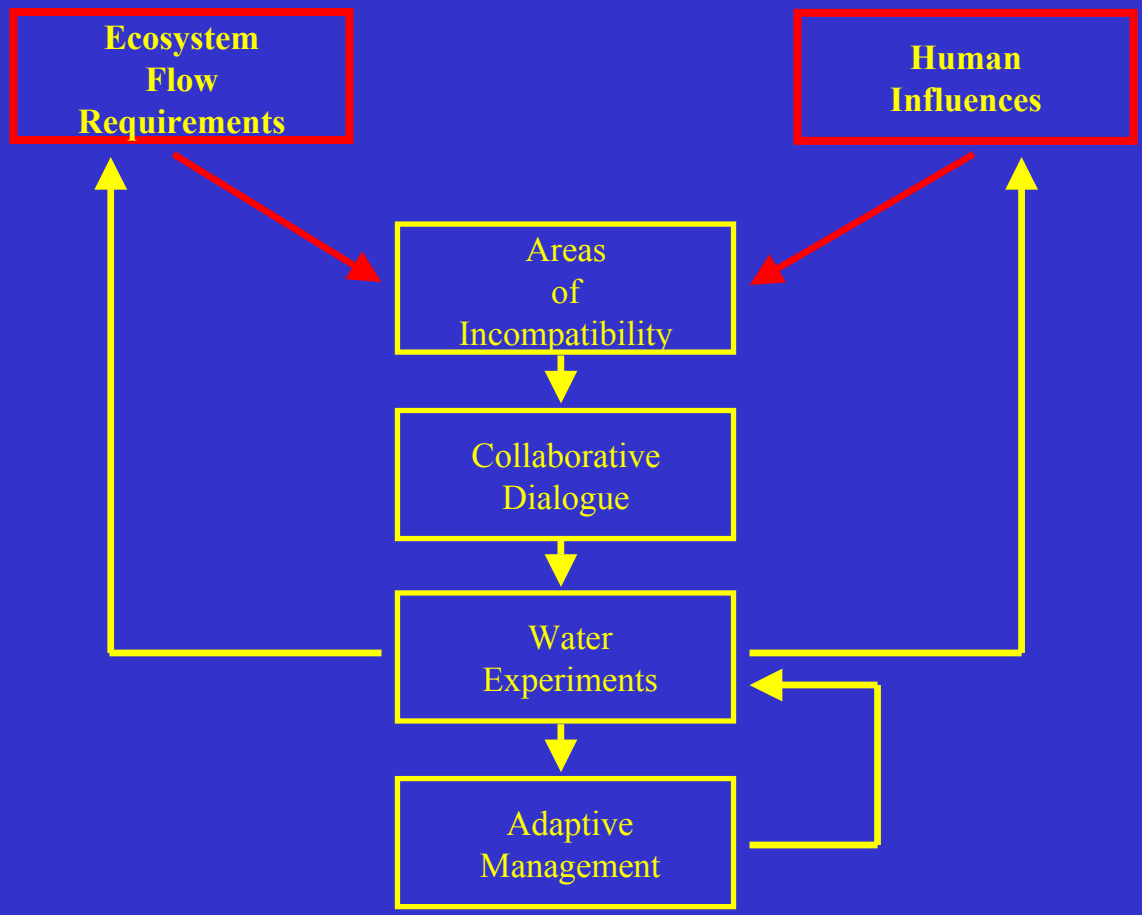



Defining Ecosystem Flow Requirements...
The goal is *not* to create optimal conditions for all species all of the time; rather, we want to create adequate conditions for all native species *enough* of the time.

Key Point

Scientists and conservationists need to work directly with water managers to define management rules for operating water infrastructure that will yield desired ecosystem flows

A Framework for Ecologically Sustainable Water Management



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Sustainable Rivers Project

Purpose…

- Advance The Nature Conservancy's conservation goals and the U.S. Army Corps of Engineers' mission in ecosystem restoration within the context of the national Memorandum of Understanding (MOU).
- Export to additional projects the lessons learned from the Corps-TNC collaboration on re-operating the Green River Dam (Kentucky) for ecosystem improvement.
- Analyze successes, problems, and solutions for re-operating Corps dams to achieve more ecologically sustainable flows, while meeting human needs.

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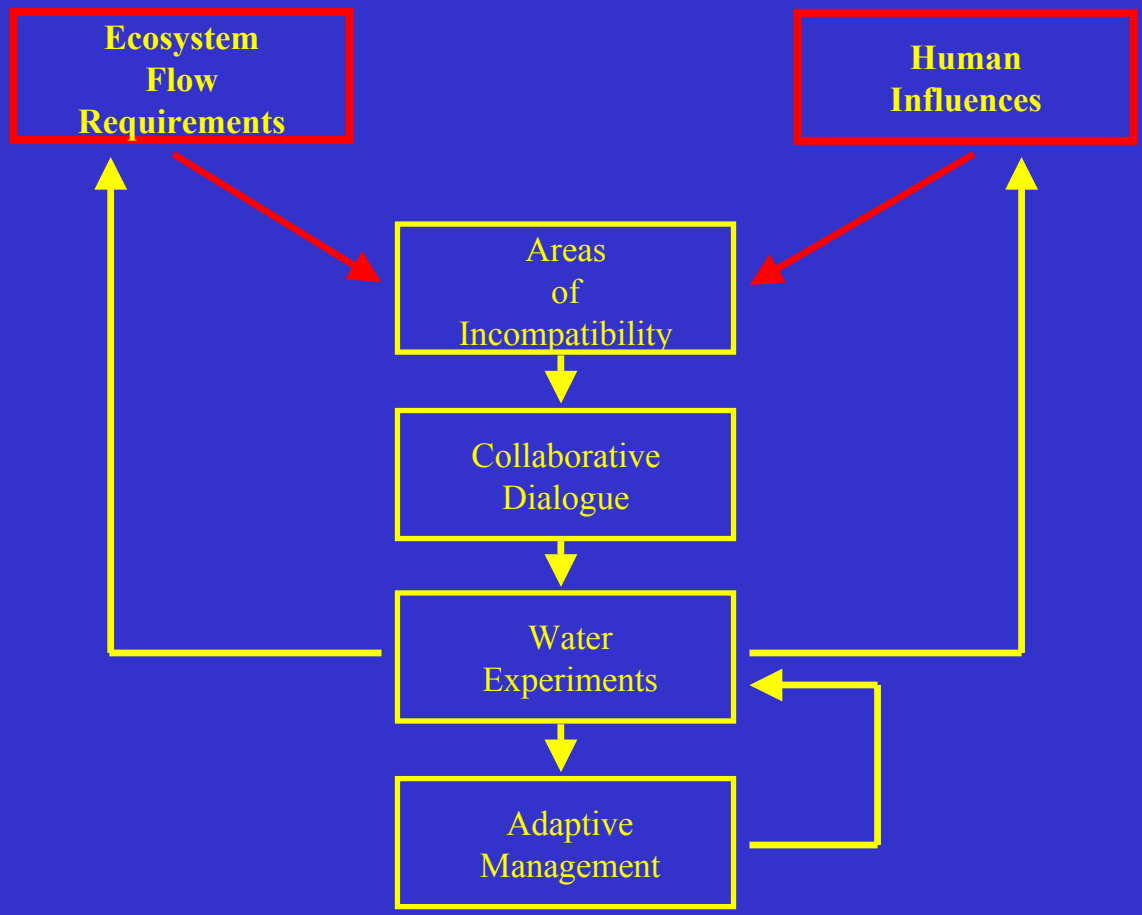
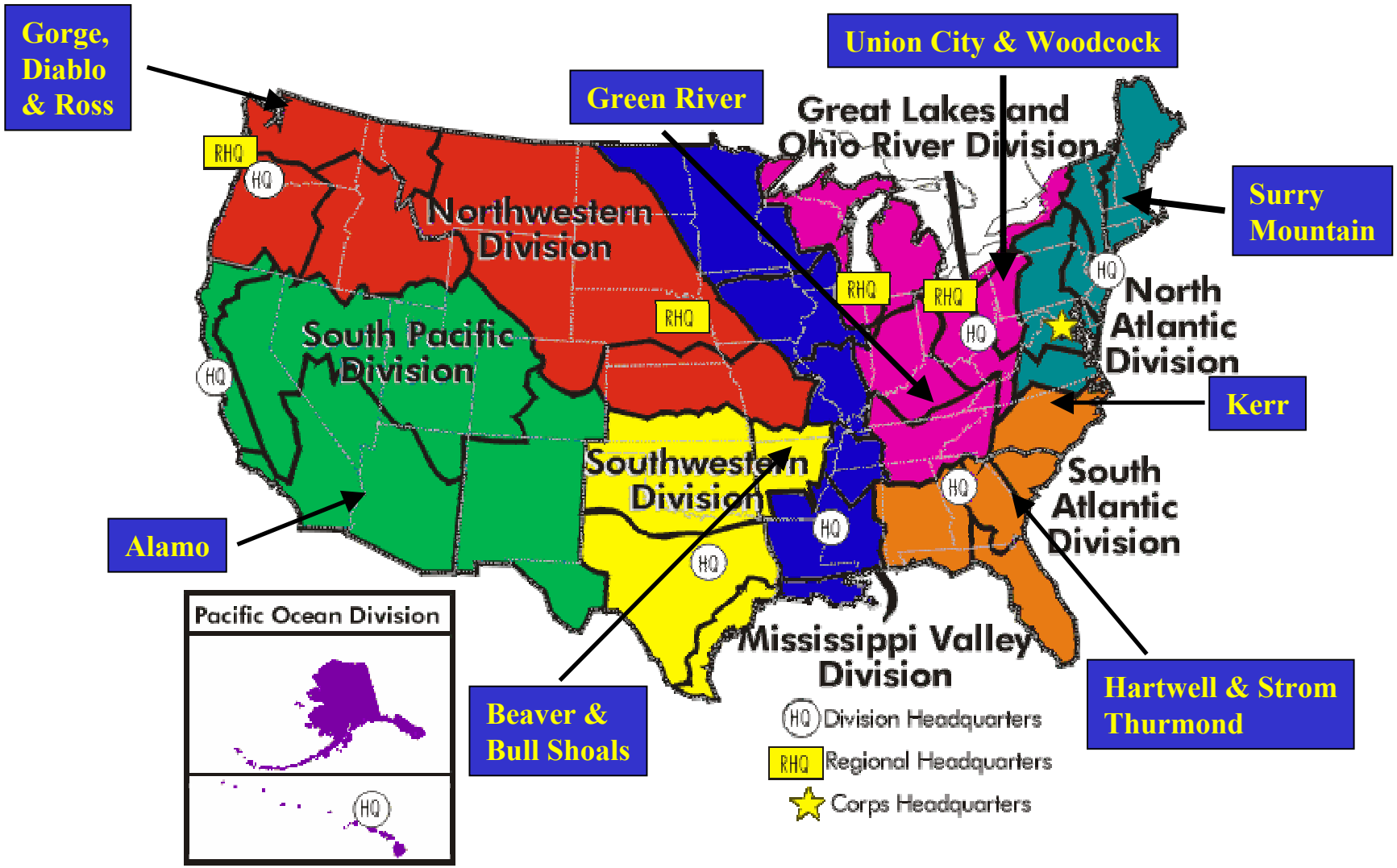
A Framework for Ecologically Sustainable Water Management



Project Sites



Sustainable Rivers Project

We intend to build sustainability into the planning, construction and operation of our projects, and it is critical that we adapt our management of America's rivers to meet the needs of the human and natural communities.

Lt. General Robert B. Flowers, Chief of Engineers

This agreement is the result of conservationists and dam managers sitting down at the table together, stating our objectives openly, and agreeing to work together to find solutions that are acceptable to all involved.

Steven McCormick, TNC president

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For more information…

↙ poster/info table

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Other useful materials:

- Managing Flows for Biodiversity (CD)
- Flow restoration database
- Process for defining ecosystem flows

www.freshwaters.org